UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,036	01/29/2002	Toshihiro Takagi	3064IT/50896	2683

7590 12/11/2008

Crowell & Moring, L.L.P.
P.O. Box 14300
Washington, DC 20044-4300

EXAMINER	
SHEPARD, JUSTIN E	
ART UNIT	PAPER NUMBER
2424	
MAIL DATE	DELIVERY MODE
12/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/058,036
Filing Date: January 29, 2002
Appellant(s): TAKAGI ET AL.

Stephen W. Palan
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/18/08 appealing from the Office action mailed 4/30/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,661,472	Shintani et al.	12-2003
6,766,526	Ellis	7-2004
6,163,345	Noguchi et al.	12-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 5, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani (6,661,472) in view of Ellis (6,766,526) in view of Noguchi.

Referring to claim 1, Shintani discloses a channel selection device in the digital/analog broadcasting receiver comprising:

a receiver for receiving coded digital/analog broadcasting signals transmitted from a broadcasting station (figure 1B, part 160; figure 4, boxes 415 and 430);

a digital/analog decoder for decoding the digital/analog broadcasting signals received by the receiver and outputting them to an image-displaying display device connected to the broadcasting receiver (figure 5);

a memory for storing a channel information included in the broadcasting signals decoded by the digital decoder (column 4, lines 11-13); a control unit for controlling the device (figure 1B, part 165); and

an input device used for a user to input an operation instruction including the channel selection to the control unit (figure 1B, part 100; figure 1A),

wherein the digital broadcasting signals have one or a plurality of sub-channels to transmit contents in one main channel (figure 4, box 430),

wherein the input device has a predetermined operation key to which an operation instruction is assigned to fix the channel, in addition to numerical-value input keys for inputting the channel number (figure 1A; column 4, lines 44-53),

wherein the control unit fixes the main/sub-channel in response to the operation instruction from the input device during the reception of the broadcast by the broadcasting receiver (column 3, lines 62-67; column 4, lines 1-7),

wherein the second selecting procedure, when receiving the input of a numerical value by the numerical-value input keys, and then receiving the input by the predetermined operation key, fixes the main channel of the number of the inputted numerical-value, and waits for the sub-channel number input, and then fixes the sub-channel of the number of the numerical value inputted by the numerical-value input keys (column 5, lines 59-63; figure 2A).

Shintani does not disclose a device for main/sub channel selection by one of two procedures; wherein the first selecting procedure, when receiving an instruction by the predetermined operation key without inputting the main channel number that is not preceded by the numerical-value input keys, fixes the main channel being currently received, and waits for the sub-channel number input, and then fixes the sub-channel of the number of the numerical value inputted by the numerical-value input keys.

In an analogous art, Ellis teaches a device for main/sub channel selection by one of two procedures (figure 4; figure 6C; column 7, lines 3-13; figure 11; column 9, lines

32-49); wherein the first selecting procedure, when receiving an instruction by the predetermined operation key without inputting the main channel number, fixes the main channel being currently received, and waits for the sub-channel number input, and then fixes the sub-channel of the number of the numerical value inputted by the numerical-value input keys (figure 6C; column 7, lines 3-13; figure 11; column 9, lines 32-49).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the graphical channel searching taught by Ellis to the device disclosed by Shintani. The motivation would have been to enable a user to tune to any channel available to him/her without knowing the specific channel numbers, thereby making the system easier to use.

Shintani and Ellis do not disclose a device wherein the main channel is fixed even when the predetermined operation key is not preceded by the numerical-value input keys.

In an analogous art, Noguchi teaches a device wherein the main channel is fixed even when the predetermined operation key is not preceded by the numerical-value input keys (figure 10, parts 1000, 1005 and 1010; figure 11).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the channel banner displaying taught by Noguchi to the device disclosed by Shintani and Ellis. The motivation would have been to enable the user to display information about the current channel being viewed, so an informed decision about whether or not to watch the program can be made.

Claim 8 is rejected on the same grounds as claim 1.

Referring to claim 4, Shintani discloses a channel selection device in the digital/analog broadcasting receiver according to claim 2, wherein the predetermined operation key is a "-" key (column 3, lines 30-33; Note: as the operation key is not a “-“ in Ellis, Shintani shows that the “-“ key is an obvious choice to perform the action).

Claim 9 is rejected on the same grounds as claim 4.

Referring to claim 5, Shintani does not disclose a channel selection device in the digital/analog broadcasting receiver according to claim 2, wherein the channel selection device further comprises an On-Screen Display (OSD) output circuit for OSD displaying the main channel number and the sub-channel number inputted by the numerical-value input keys and fixed by the control unit on the display device.

In an analogous art, Ellis teaches a channel selection device in the digital/analog broadcasting receiver according to claim 2, wherein the channel selection device further comprises an On-Screen Display (OSD) output circuit for OSD displaying the main channel number and the sub-channel number inputted by the numerical-value input keys and fixed by the control unit on the display device (column 3, line 66 to column 4, line 2; figure 4; figure 11).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the OSD circuit taught by Ellis to the system disclosed by Shintani. The motivation would have been to offer the user a visual feedback that would warn him/her if an unwanted key had been pressed.

(10) Response to Argument

Page 8:

The appellant argues that the combination of Shintani, Ellis and Noguchi does not teach the first channel selecting procedure, which is performed "when receiving an instruction by the predetermined operation key that is not preceded by the numerical-value input keys." In the second paragraph of this page the appellant points out the subject matter of each of the references used and why their combination would not meet the above limitation.

The examiner agrees with the appellant that Shintani discloses a traditional minor channel tuning system as is exemplified by the flow chart of figure 2A. The Shintani reference is being used (as is shown in the office action) to meet the second channel selection procedure limitation found in the claims, which is the same as the Shintani reference as seen in figures 4(a) and 4(b) of the appellants specification.

The examiner also agrees that all the techniques taught by Ellis require an initial input of a numerical key. Ellis does teach that after the initial numeric input, that the user can use the up and down arrows on the key pad to select channels at a higher number than the number entered (figure 6C; column 7, lines 3-13). Ellis goes on to teach that minor channels can also be selected using the arrow keys on the remote once a channel button is inputted (figure 11; column 9, lines 32-49).

The examiner agrees that Noguchi does not teach a channel changing procedure that meets the limitation found in the claims. The appellant is ignoring the cited portion

from the office action (figure 10, parts 1000, 1005 and 1010; figure 11). This portion of the reference teaches that a user can input a button on the remote that is not a number as seen on figure 4 (DISPLAY button) to bring up the channel banner shown in figure 11. The information shown on the channel banner is the channel, the station call letters, the title of the current program, etc. Referring back to figure 3 (box 64) of Ellis, this shows the information that is displayed upon the input of a specific channel button. The information displayed substantially overlaps in each of the references, and it is the opinion of the examiner that the information displayed by Ellis is a channel banner. Therefore it is the opinion of the examiner that the channel input shown in figure 3 (part 62) could be replaced with the display button taught by Noguchi to allow the channel changing taught by Ellis to be preformed without the inputting of an number key.

Page 9:

The appellant continues to argue that the addition of Noguchi after the last appeal brief does not create a combination that would meet the first channel selection procedure. As stated above, the channel banner display (figures 10 and 11) does have relevance to this case. This portion of the reference teaches that a user can input a button on the remote that is not a number as seen on figure 4 (DISPLAY button) to bring up the channel banner shown in figure 11. The information shown on the channel banner is the channel, the station call letters, the title of the current program, etc. Referring back to figure 3 (box 64) of Ellis, this shows the information that is displayed upon the input of a specific channel button. The information displayed substantially

overlaps in each of the references, and it is the opinion of the examiner that the information displayed by Ellis is a channel banner. Therefore it is the opinion of the examiner that the channel input shown in figure 3 (part 62) could be replaced with the display button taught by Noguchi to allow the channel changing taught by Ellis to be preformed without the inputting of an number key.

Pages 10-12:

The appellant points out a channel selection technique taught by Noguchi, but as this technique is not used by the examiner in the reference, this is not relevant. The cited portion (figures 10 and 11) are being used to teach displaying the channel banner taught by Ellis without the pressing on a number key.

Pages 13 and 14:

The appellant argues that Noguchi does not teach a procedure wherein “the main channel is fixed even when the predetermined operation key is not preceded by the numerical-value input keys," as stated on page 4 of the office action. As stated on the same page of the office action, it is stated that Ellis teaches fixing a main channel without inputting a number key. For example, if the user is currently watching channel 252. The user inputs the numbers '2' and '5' to bring up the second box shown in figure 6C. The user than pushes the down button 3 times to get to channel 252 as shown in the third box of figure 6C. If there are minor channels associated with channel 252, a right arrow would appear as shown in figure 11, part 71 (column 9, lines 32-49) and

allow the user to press a button that was not a number key to then select a minor channel. As the procedure starts with the entering of a number key (or keys), this procedure is close, but does not explicitly meet the first channel selection limitation, Noguchi was brought in to remedy the combination. The addition of Noguchi (as shown above) was to teach displaying the channel banner without the pressing of a number key as is required by Ellis.

The combination, as suggested by the examiner, would allow for a user to press the display button taught by Noguchi to bring up the channel banner of the current channel (figure 11). Using another example, if the user was watching channel 9 and then pressed the display button taught by Noguchi it is the opinion of the examiner that figure 11, part 190 would be displayed on the user's television. As there are minor channels associated with channel 9, the right arrow appears indicating the existence of the minor channels. The user would then press the right arrow on the remote and then press a button to select a minor channel (9.2). As in this example of the combination the user never inputs a number channel to start the selection process, it is interpreted as meeting the first channel selection limitation.

Page 15, first partial paragraph:

The appellant argues that according to the examiner, that pressing a volume key in Noguchi would result in fixing the main channel. If the volume key resulted in the channel banner being displayed, then the examiner would agree that this is the case.

As there is not evidence of this in Noguchi, the user would be required to press the display button to fix the main channel as shown in the responses above.

Page 15, Section 3:

The appellant argues that the suggested combination would result in a procedure involving:

(1) pressing the "DISPLAY" button

(2) pressing a numerical-value input key corresponding to a sub-channel

This is an incorrect interpretation of the combination. The suggested combination procedure would be as follows:

(1) pressing the "DISPLAY" button

(2) a channel banner would be displayed on the user's television screen (as shown in figure 11, part 190 of Ellis)

(3) if there are minor channels present, the user would press the right button on the remote control to access the minor channels (figure 11, part 200; column 9, lines 32-49)

(4) the user would then press the arrow keys or a number key to select a minor channel.

As this procedure results in a major channel being fixed (when the right arrow is pressed) without a number button being pressed (taught by bringing up the channel banner with the pressing of a DISPLAY button instead of a number key as taught by Ellis), it is interpreted as meeting the first channel selection procedure limitation.

Page 16, paragraph beginning with “Instead”:

The appellant argues that this resulting combination would not result in the “simple” sub-channel selection technique that was invented by the appellant’s representative. The examiner agrees that the combination would be more complicated than pressing a “-“ key and then a minor channel button, but this 2 button simplicity is not found in the claim limitations. The limitation only states that a number key should not be used to fix the main channel as is taught by Shintani, and it is the opinion of the examiner that this combination meets the limitation as claimed.

Page 17:

The appellant argues, and the examiner agrees, that Shintani performs the second channel selection procedure found in the claims.

Pages 18-31:

The appellant argues that Ellis requires the pressing of a number key to begin the minor channel selection procedure. The examiner agrees that when taken alone, this is the correct reading of Ellis, but when combined with Noguchi (as shown above) that this is not the case. These pages of the brief further describe the functioning of Ellis, while ignoring the combination of Noguchi which remedies the lacking of Ellis with the addition of a DISPLAY button as shown above. By acknowledging that the only thing stopping Ellis from meeting the first channel selection procedure is the initial

number input to display the channel banner (figure 3), the appellant is showing that by adding in the DISPLAY button taught by Noguchi (figures 10 and 11) to display a channel banner would result in a combination that meets the limitation.

Pages 32 and 33:

The appellant argues that this resulting combination would not result in the "simple" sub-channel selection technique that was invented by the appellant's representative, but instead a much more complex channel selecting procedure.

The suggested combination procedure would be as follows:

(1) pressing the "DISPLAY" button

(2) a channel banner would be displayed on the user's television screen (as shown in figure 11, part 190 of Ellis)

(3) if there are minor channels present, the user would press the right button on the remote control to access the minor channels (figure 11, part 200; column 9, lines 32-49)

(4) the user would then press the arrow keys or a number key to select a minor channel.

The examiner agrees that this combination would be more complicated than pressing a "-" key and then a minor channel button, but this 2 button simplicity is not found in the claim limitations. The limitation only states that a number key should not be used to fix

the main channel as is taught by Shintani, and it is the opinion of the examiner that this combination meets the limitation as claimed.

Page 33, last paragraph continuing onto page 34:

The appellant argues that hindsight was used in the interpretation of Ellis. As Ellis is a single reference, how hindsight would apply does not follow the normal use of the term in the office wherein a combination of 2 references would only be obvious if hindsight was used. If the appellant is arguing that hindsight was used for the combination of Ellis and Noguchi, the display button is a common button on most television or set top box (i.e. TiVo) remote controllers and adding one to the invention taught by Ellis would be obvious to one of ordinary skill in the art to gain knowledge about the program currently being watched without having to know and input the channel numbers on the remote controller.

Page 34, last paragraph:

The appellant argues once again that the proposed combination would be more complex than the invention. As was indicated above, this may be true but this simplicity is not disclosed in the claims and is therefore moot.

Conclusion:

The examiner feels that there is a difference between the appellant's representative's invention and the proposed combination by the examiner, but this

difference is not disclosed in the claim language. As claimed, the first channel selection procedure only requires that it is not entered by pressing a number key. With the addition of the DISPLAY button taught by Noguchi to activate the channel banner taught by Ellis, the method would be able to select a minor channel without pressing in a major (on any number key) channel key before inputting the minor channel key.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Justin Shepard

Conferees:

Chris Kelley

/Chris Kelley/

Supervisory Patent Examiner, Art Unit 2424

/Christopher Grant/

Supervisory Patent Examiner, Art Unit 2423

Chris Grant